Chang Liu

List of Publications by Year
in descending order

59 papers	3,229 citations	185998 28 h-index	149479 56 g-index
61 all docs	61 docs citations	61 times ranked	5112 citing authors

#	Article	IF	Citations
1	Flexible layer-structured Bi2Te3 thermoelectric on a carbon nanotube scaffold. Nature Materials, 2019, 18, 62-68.	13.3	316
2	Vertically Aligned Carbon Nanotubes Grown on Graphene Paper as Electrodes in Lithiumâ€Ion Batteries and Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2011, 1, 486-490.	10.2	309
3	Unsaturated edge-anchored Ni single atoms on porous microwave exfoliated graphene oxide for electrochemical CO2. Applied Catalysis B: Environmental, 2019, 243, 294-303.	10.8	243
4	Heteroatomâ€Doped Carbon Nanotube and Grapheneâ€Based Electrocatalysts for Oxygen Reduction Reaction. Small, 2017, 13, 1702002.	5.2	202
5	Single-wall carbon nanotube network enabled ultrahigh sulfur-content electrodes for high-performance lithium-sulfur batteries. Nano Energy, 2017, 42, 205-214.	8.2	183
6	Ultrahigh-performance transparent conductive films of carbon-welded isolated single-wall carbon nanotubes. Science Advances, 2018, 4, eaap9264.	4.7	178
7	Secondary-Atom-Assisted Synthesis of Single Iron Atoms Anchored on N-Doped Carbon Nanowires for Oxygen Reduction Reaction. ACS Catalysis, 2019, 9, 5929-5934.	5.5	149
8	A flexible cotton-derived carbon sponge for high-performance capacitive deionization. Carbon, 2016, 101, 1-8.	5.4	100
9	Carbon nanotube encapsulated in nitrogen and phosphorus co-doped carbon as a bifunctional electrocatalyst for oxygen reduction and evolution reactions. Carbon, 2018, 139, 156-163.	5.4	97
10	Highly Dispersive Cerium Atoms on Carbon Nanowires as Oxygen Reduction Reaction Electrocatalysts for Znâ€"Air Batteries. Nano Letters, 2021, 21, 4508-4515.	4.5	89
11	Hierarchically porous Fe-N-doped carbon nanotubes as efficient electrocatalyst for oxygen reduction. Carbon, 2016, 109, 632-639.	5.4	74
12	Fluorination-assisted preparation of self-supporting single-atom Fe-N-doped single-wall carbon nanotube film as bifunctional oxygen electrode for rechargeable Zn-Air batteries. Applied Catalysis B: Environmental, 2021, 294, 120239.	10.8	70
13	Carbon nanotube-linked hollow carbon nanospheres doped with iron and nitrogen as single-atom catalysts for the oxygen reduction reaction in acidic solutions. Journal of Materials Chemistry A, 2019, 7, 14478-14482.	5.2	56
14	A Freestanding Singleâ€Wall Carbon Nanotube Film Decorated with Nâ€Doped Carbonâ€Encapsulated Ni Nanoparticles as a Bifunctional Electrocatalyst for Overall Water Splitting. Advanced Science, 2019, 6, 1802177.	5.6	56
15	A nitrogen-doped mesoporous carbon containing an embedded network of carbon nanotubes as a highly efficient catalyst for the oxygen reduction reaction. Nanoscale, 2015, 7, 19201-19206.	2.8	55
16	MXene-Carbon Nanotube Hybrid Membrane for Robust Recovery of Au from Trace-Level Solution. ACS Applied Materials & Interfaces, 2020, 12, 43032-43041.	4.0	53
17	Precise Identification of the Active Phase of Cobalt Catalyst for Carbon Nanotube Growth by <i>In Situ</i> Transmission Electron Microscopy. ACS Nano, 2020, 14, 16823-16831.	7.3	51
18	Selective removal of metallic single-walled carbon nanotubes by combined in situ and post-synthesis oxidation. Carbon, 2010, 48, 2941-2947.	5.4	50

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19	A MnO2 nanosheet/single-wall carbon nanotube hybrid fiber for wearable solid-state supercapacitors. Carbon, 2018, 140, 634-643.	5.4	48
20	Monolayer carbon-encapsulated Mo-doped Ni nanoparticles anchored on single-wall carbon nanotube film for total water splitting. Applied Catalysis B: Environmental, 2020, 269, 118823.	10.8	46
21	Identification of active sites in nitrogen and sulfur co-doped carbon-based oxygen reduction catalysts. Carbon, 2019, 147, 303-311.	5.4	44
22	Electrochemically substituted metal phthalocyanines, e-MPc (M = Co, Ni), as highly active and selective catalysts for CO₂reduction. Journal of Materials Chemistry A, 2018, 6, 1370-1375.	5.2	43
23	Small-bundle single-wall carbon nanotubes for high-efficiency silicon heterojunction solar cells. Nano Energy, 2018, 50, 521-527.	8.2	43
24	Carbon nanotube/silicon heterojunctions for photovoltaic applications. Nano Materials Science, 2019, 1, 156-172.	3.9	43
25	Vertically aligned carbon nanotube arrays as a thermal interface material. APL Materials, 2019, 7, .	2.2	43
26	Carbon nanotubes prepared by anodic aluminum oxide template method. Science Bulletin, 2012, 57, 187-204.	1.7	35
27	Decoupling phonon and carrier scattering at carbon nanotube/Bi2Te3 interfaces for improved thermoelectric performance. Carbon, 2020, 170, 191-198.	5.4	33
28	Semiconductor nanochannels in metallic carbon nanotubes by thermomechanical chirality alteration. Science, 2021, 374, 1616-1620.	6.0	32
29	A flexible thermoelectric device based on a Bi2Te3-carbon nanotube hybrid. Journal of Materials Science and Technology, 2020, 58, 80-85.	5.6	31
30	High-efficiency and stable silicon heterojunction solar cells with lightly fluorinated single-wall carbon nanotube films. Nano Energy, 2020, 69, 104442.	8.2	28
31	The effect of carbon support on the oxygen reduction activity and durability of single-atom iron catalysts. MRS Communications, 2018, 8, 1158-1166.	0.8	27
32	Carbon-encapsulated NiO nanoparticle decorated single-walled carbon nanotube thin films for binderless flexible electrodes of supercapacitors. Journal of Materials Chemistry A, 2017, 5, 24813-24819.	5.2	25
33	A Platelet Graphitic Nanofiberâ€Carbon Nanotube Hybrid for Efficient Oxygen Evolution Reaction. ChemCatChem, 2020, 12, 360-365.	1.8	25
34	Preparation of metallic single-wall carbon nanotubes. Carbon, 2019, 147, 187-198.	5.4	22
35	Growth of metal-catalyst-free nitrogen-doped metallic single-wall carbon nanotubes. Nanoscale, 2014, 6, 12065-12070.	2.8	21
36	Clean, fast and scalable transfer of ultrathin/patterned vertically-aligned carbon nanotube arrays. Carbon, 2018, 133, 275-282.	5.4	21

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37	Transparent and flexible hydrogen sensor based on semiconducting single-wall carbon nanotube networks. Carbon, 2019, 151, 156-159.	5.4	19
38	Growth of double-walled carbon nanotubes from silicon oxide nanoparticles. Carbon, 2013, 56, 167-172.	5.4	18
39	Controlled synthesis of quasi-one-dimensional boron nitride nanostructures. Journal of Materials Research, 2007, 22, 2809-2816.	1.2	17
40	Surface-restrained growth of vertically aligned carbon nanotube arrays with excellent thermal transport performance. Nanoscale, 2017, 9, 8213-8219.	2.8	17
41	Iron silicide-catalyzed growth of single-walled carbon nanotubes with a narrow diameter distribution. Carbon, 2019, 149, 139-143.	5.4	17
42	A Flexible and Infrared-Transparent Bi₂Te₃-Carbon Nanotube Thermoelectric Hybrid for both Active and Passive Cooling. ACS Applied Electronic Materials, 2020, 2, 3008-3016.	2.0	15
43	Applications of carbon nanotubes and graphene produced by chemical vapor deposition. MRS Bulletin, 2017, 42, 825-833.	1.7	14
44	Controlled Oneâ€pot Synthesis of Nickel Single Atoms Embedded in Carbon Nanotube and Graphene Supports with High Loading. ChemNanoMat, 2020, 6, 1063-1074.	1.5	14
45	De-bundling of single-wall carbon nanotubes induced by an electric field during arc discharge synthesis. Carbon, 2014, 74, 370-373.	5.4	13
46	Temperature-dependent selective nucleation of single-walled carbon nanotubes from stabilized catalyst nanoparticles. Chemical Engineering Journal, 2022, 431, 133487.	6.6	13
47	Kinetics-Controlled Growth of Metallic Single-Wall Carbon Nanotubes from CoRe_{<i>x</i>} Nanoparticles. ACS Nano, 2022, 16, 232-240.	7.3	13
48	Oriented outperforms disorder: Thickness-independent mass transport for lithium-sulfur batteries. Carbon, 2019, 154, 90-97.	5.4	12
49	Carbon fiber-promoted activation of catalyst for efficient growth of single-walled carbon nanotubes. Carbon, 2020, 156, 410-415.	5.4	12
50	Ionothermal-Transformation Strategy to Synthesize Hierarchically Tubular Porous Single-Iron-Atom Catalysts for High-Performance Zincâ€"Air Batteries. ACS Applied Materials & Interfaces, 2021, 13, 58576-58584.	4.0	12
51	Selective growth of semiconducting single-wall carbon nanotubes using SiC as a catalyst. Carbon, 2018, 135, 195-201.	5.4	11
52	High-throughput screening and machine learning for the efficient growth of high-quality single-wall carbon nanotubes. Nano Research, 2021, 14, 4610-4615.	5.8	11
53	Aerosol Jet Printing of Graphene and Carbon Nanotube Patterns on Realistically Rugged Substrates. ACS Omega, 2021, 6, 34301-34313.	1.6	11
54	Synthesis of high quality nitrogen-doped single-wall carbon nanotubes. Science China Materials, 2015, 58, 603-610.	3.5	9

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55	The importance of H2 in the controlled growth of semiconducting single-wall carbon nanotubes. Journal of Materials Science and Technology, 2020, 54, 105-111.	5.6	9
56	FeCl3-functionalized graphene oxide/single-wall carbon nanotube/silicon heterojunction solar cells with an efficiency of 17.5%. Journal of Materials Chemistry A, 0, , .	5.2	9
57	Observations of novel carbon nanotubes with multiple hollow cores. Carbon, 2003, 41, 2477-2480.	5.4	8
58	Growth of tadpole-like carbon nanotubes from TiO2 nanoparticles. Carbon, 2013, 55, 253-259.	5.4	7
59	Ultrahigh thermal stability of carbon encapsulated Cu nanograin on a carbon nanotube scaffold. Carbon, 2021, 172, 712-719.	5.4	7